

REMARKS

The specification and Claims have been carefully reviewed in light of the Examiner's action.

Claim 1 has been cancelled and rewritten as new Claim 13. Claims 2-12 have been amended to make them dependent on new Claim 13. No new matter has been added.

Before taking up the claims in detail attention will be briefly given to the references cited by the examiner.

The examiner rejected claims 1 and 11 as being anticipated 35 USC Sect. 102(a) by the U.S. Patent to Andrews No. 3,393,962.

The Andrews Patent describes a liquid applicator with a "hollow cylindrical body portion 1 of resiliently deformable material, open at one end and closed at its other end by a cap 2, formed integrally with the body portion 1. A thin-walled sealed glass ampoule 3 is inserted within the body portion 1, the ampoule containing the liquid, for example nail varnish, to be applied.

An applicator head portion 4 is inserted within the open end of the body portion 1 and comprises a tubular element formed with an axial bore 5. One end of the head portion 4 has a cylindrical stem 6 dimensioned so as to be retained as a force-fit within the body portion 1, the open end edge of which abuts against an external shoulder 7 formed on the head portion 4.

The bore 5 has a portion 8 of uniform diameter extending for a short distance from the inner end of the head portion and terminating at a point adjacent the external shoulder 7; thereafter, the bore gradually reduces in diameter to define a tapered portion for receiving a filter 9. The tapered portion is followed by a short portion 10 of uniform

but reduced diameter. The portion 10 communicates in turn with one end of a constricted neck 11, the purpose of which is to prevent the free flow of liquid therethrough, the diameter of the neck 11 being chosen such that, having regard to the natural viscosity to the liquid employed, the liquid can flow through the neck 11 only when forced under pressure.

The outer end of the neck 11 opens into a brush holding chamber defined by a short portion 12 of the bore 5 wherein the diameter increases gradually towards the outer end, and a longer portion 13 wherein the diameter gradually decreases towards the outlet 14.

A nylon brush 15 is fitted within the brush holding chamber. The brush consists of a plurality of nylon filaments, laid parallel and doubled over at their mid point, a spring wire clip 16 binding the bight of the nylon filaments and engaging the wall of the portion 12 of the bore so that the bight of the nylon filaments is secured within the bore, with the tops of the filaments extending substantially axially from the outlet 14.

The filter 9 preferably consists of a plug of plastic foam material, forced into the tapered portion of the bore between the cylindrical portions 8 and 10. The foam material, whilst permitting liquid to pass, effectively prevents the passage of solid particles e.g. fragments of glass from the ampoule, when the latter is broken.

In use, for example as a nail varnish applicator, the body portion, containing the glass ampoule, is squeezed between finger and thumb until the ampoule breaks and releases the liquid into the body portion, the liquid is forced through the filter 9 and the constricted neck 11, into the brush 15, whence it may be applied as desired. Control of the quantity and the rate at which the liquid is expelled into the brush is achieved by

varying the pressure applied to the body portion 1. When pressure is removed from the body, the latter resumes its original shape by drawing air and/or liquid back into the body portion until the internal and external pressures are equalized. Thus there is no tendency for further liquid to be expelled into the brush.” (underlining added).

While the Andrews Patent drawings may superficially appear to show an hourglass shape, there is no reference in the patent to compressing the brush to control the flow of fluid, the density of the brush is not discussed in Andrews, and it is retained by a spring wire clip 16 engaged in the wall of the applicator to hold the brush in place, and not by constriction of the outer end of outlet 14. The fluid flow is controlled by the constricted neck 11, which is a cylindrical bore. The operation of the applicator requires that the user constantly apply pressure to the outside of the applicator to cause liquid to be forced under pressure to the brush. Proper use of the device relies heavily on the user’s ability to squeeze just the right quantity of fluid to the brush tip through finger pressure on the tube. Too great a squeeze pressure will cause the applicator brush to drip, or cause too much, or varying amounts of fluid to be applied to the surface. Using the Andrews device in an inverted upward position to apply a uniform application, is particularly difficult if not impossible, as a constantly increasing finger tip pressure would be required to apply a uniform band of application fluid.

Applicant’s applicator does not use pressure applied by a user, but relies on the combined three section applicator element to dispense and apply the dispensed liquids at a uniform rate and thickness.

The Examiner rejected claim 2 as obvious, 35 USC Sect. 103 over Andrews. As discussed above, Andrews does not have a control valve section at outlet 14, there is no

compression of the brush at 14, or any other location to form a control valve to restrict fluid flow. Rather Andrews restricts fluid flow by using a bore 12, which requires pressure to force liquid out the applicator.

The Examiner rejected claim 3 as obvious over Andrews. Claim 3 is dependent on claim 13. As discussed above Andrews does not provide a control valve section, which is selected to have a porous density dependent on the viscosity of the liquid to be dispensed.

The Examiner rejected Claim 4 as obvious in view of Andrews and the prior art. Claim 4 is dependent on Claim 13, As discussed above the structure of applicant is not disclosed in Andrews, nor is it obvious in view of Andrews.

The Examiner rejected Claim 5 as obvious over Andrews in view of the prior art. As discussed above applicant's structure is not obvious in view of Andrews.

The Examiner did not provide any explanation or grounds for rejection of Claim 6.

The Examiner rejected Claim 7 as obvious over Andrews in view of the patent to Weinstein No. 4,957,38. Claim 7 is dependent on claim 13.

The Weinstein patent describes an applicator which has an ampoule contained therein, with a plunger, which is activated by a cover pushing on it to break the ampoule. No structure comparable to applicants is even remotely disclosed in Andrews or Weinstein.

The Examiner rejected Claim 8 as obvious over Andrews in view of the U.S. Patent to Provenzola No. 5,548,016. Claim 8 is dependent on Claim 13.

The Patent to Andrews, as discussed above, does not disclose the structure of applicant and while the Provenzola patent describes an isocyanate based primer it is for a composition only and no structure is described in Provenzola.

The Examiner rejected Claim 9 as obvious over Andrews in view of the U.S. Patent to Bennett No. 4,732,287. Claim 9 is dependent on claim 13.

As discussed above, Andrews does not disclose the structure of applicant. The Examiner stated that Andrews retained its brush by force fit, which is incorrect as no mention is made in the patent that the brush is retained other than by the metal spring clip 16, in the wall of the portion 12, and not by the outlet 14. Bennett does not disclose the structure of applicant.

The Examiner rejected Claim 10 as obvious over Andrews in view of Bennett. Claim 10 is dependent on Claim 13. As discussed above, neither Andrews nor Bennett discloses the structure of applicant.

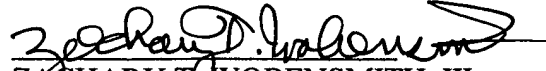
The Examiner rejected claim 12 as obvious over Andrews in view of the U.S. Patent to Gueret No. 5,899,622. Claim 12 is dependent on claim 13.

Gueret discloses an applicator, which has a longitudinal shape with a core 10, but has none of the structure of applicant.

It is submitted that none of the references cited by the Examiner discloses applicant's structure either alone or in combination.

Accordingly, it is believed that the Claims are in condition for allowance, and such action is requested and urged.

Respectfully submitted,



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